\*Achillea Borealis Bong.—Damp rocky places; cliffs and maritime rocks; C. Native. Savoyard, St. Pierre, August 2, 1900.

ACHILLEA MILLEFOLIUM L. is introduced as a weed in cultivated ground. Gautier, Bonnet and Delamare report only this plant; they do not mention A. borealis.

Carduus nutans L.-Introduced from Europe; R. Town of St.

Pierre, September 20, 1902.

Reported only by Gautier.

\*Centaurea nigra L.—Introduced from Europe and thoroughly naturalized in cultivated ground, roadsides and waste places; C. Farm at Savoyard, St. Pierre, August 18, 1901.

\*Cichorium Intybus L.—Introduced from Europe, but rare and casual. Roadside near the Town of St. Pierre, August 16, 1901.

Hypochaeris radicata L.—Introduced weed; R. Farm at Savo-yard, St. Pierre, August 18, 1901.

Reported only by Gautier.

Sonchus arvensis L.—Introduced in cultivated ground and naturalized, but far less common than S. oleraceus and asper. Garden in the Town of Saint Pierre, August 29, 1901.

Reported only by Gautier.

Prenanthes trifoliolata (Cass.) Fernald.—Rocky plains and hillsides; grassy borders of streams; woods and thickets; C. Cap de Miquelon, August 11, 1900.

Named Prenanthes alba L. by Bonnet and Delamare, and Nabalus serpentarius DC. by Gautier.

(To be continued)

## THE AMERICAN CARDAMINE PARVIFLORA.

## M. L. FERNALD

In recent American literature Cardamine parviflora L. finds a regular place, with no suggestion that it is not quite identical with the Eurasian plant. Examination of the Eurasian and American series, however, brings out certain tendencies which are so constant as to indicate that the American plant is at least a good geographic variety. In fact Dr. O. E. Schulz in his Monographie der Gattung Cardamine has well brought out the distinctive characters, here repeated, with slight alterations suggested by more abundant American material:

In typical C. parviflora of Eurasia the leaflets of the basal rosettes

oblong and mostly entire; leaflets of the cauline leaves 5-8 pairs; flowers 2-2.5 mm. long; fruiting pedicels 7-10 mm. long; siliques 1-2 cm. long; ovules or seeds 22-36.

The American plant commonly stouter; leaflets of rosette leaves broader, commonly obovate to suborbicular, and usually with 1 or 2 pairs of teeth; cauline leaves with 2-6 pairs of leaflets; flowers 2.5-3.5 mm. long; fruiting pedicels 4-8 (rarely-10) mm. long; siliques 1.5-3 cm. long; ovules or seeds 26-46.

The American variety was described as a species by Michaux who, however, called it Cardamine virginica L. It was later taken up by Torrey & Gray as C. hirsuta, δ virginica and by Schulz as C. parviflora, subsp. virginica (L.) O. E. Schulz. It has long been known, however, that Cardamine virginica L. was the plant afterward called Arabis ludoviciana Hook.; consequently, although Michaux's plant, described as C. virginica, was the American representative of C. parviflora, we cannot take up C. virginica Michx. nor the varietal and subspecific combinations based upon Michaux's misapplication of the Linnean name. Nor can we use for our plant the name C. hirsuta, var. sylvatica (Link) Gray; for, although Gray described our plant, he misidentified it with the quite different C. sylvatica Link. The first available varietal name for the American plant seems to be C. parviflora, var. arenicola (Britton) O. E. Schulz.

The essential bibliography is as follows:

Cardamine Parviflora L., var. arenicola (Britton) O. E. Schulz, Engler's Bot. Jahrb. xxxii. 485 (1903). C. parviflora of Am. Auth., not L. C. virginica Michx. Fl. Bor.-Am. ii. 29 (1803), as to plant described not as to identification with C. virginica L. C. hirsuta, δ virginica Torr. & Gr. Fl. i. 85 (1838), as to plant not as to namebringing synonym, C. virginica L. C. hirsuta, var. sylvatica Gray, Man. ed. 5: 67 (1867), as to plant not as to name-bringing synonym, C. sylvatica Link. C. arenicola Britton, Bull. Torr. Bot. Cl. xix. 220 (1892). C. parviflora, subsp. virginica O. E. Schulz, l. c. 484 (1903), as to plant not as to name-bringing synonym, C. virginica L.

GRAY HERBARIUM.

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<sup>&</sup>lt;sup>1</sup>The combination Arabis virginica is commonly ascribed to Trelease (1891). It was, however, properly made for the Arabis more than 80 years earlier, and instead of Arabis virginica (L.) Trel. we should write A. virginica (L.) Poir. Encyc. Suppl. i. 413 (1810).